

REMARKS

Upon entry of this amendment, independent claim 1 with dependent claims 2 and 4-9 and independent claim 11 are in the application.

Claim 1 has been amended to recite that the sensor signal indicates when the foot is lifted and when the foot is placed, and that the sensor signal outputs a stimulation signal to the electrode comprising a rise portion and a stimulation portion when the foot is lifted, and a simulation signal comprising an extension portion and a fall portion when the foot is placed. New claim 11 recites that the controller receives a first signal indicating when the foot is lifted during the walking movement and generates a first control signal to the electrode in response to the first signal. Claim 11 also recites that the controller receives a second signal when the foot is placed and generates a second control signal to the electrode in response to the second control signal. Such a signal is shown in Figure 4 of the application. Accordingly, the amendment does not introduce any new matter.

Claim 1 was rejected under 35 U.S.C. 103(a) as being obvious over U.S. 2003/0144710 (Haugland et al.) in view of U.S. 5,586,557 (Nelson et al.). Claims 2, 4-6 and 9 were rejected under 35 U.S.C. § 103 as being unpatentable over Haugland in view of Nelson, and further in view of U.S. 5,485,402 (Smith et al.). Claims 7 and 8 were rejected under 37 U.S.C. § 103(a) as being unpatentable over Haugland in view of Nelson and Smith and further in view of US 2004/0143302 (Sieracki et al.).

Claim 1 has been amended to recite that the sensor signal indicates when the foot is lifted and when the foot is placed, and that the sensor signal outputs a stimulation signal to the electrode comprising a rise portion and a stimulation portion when the foot is lifted, and a simulation signal comprising an extension portion and a fall portion when the foot is placed. As shown in Figure 4 of the subject application, when the patient lifts their foot, the controller starts generating a stimulation signal from a zero strength to a stimulation strength (the initial ramp portion) and maintains the signal at stimulation strength (the stimulation portion) until the patient's foot is placed on the ground again. The controller maintains the stimulation signal for an extension portion and then ramps the signal down from the stimulation strength to a zero strength. The extension portion maintains muscle tension in the ankle joint during heel strike to create greater stability in the walking pattern.

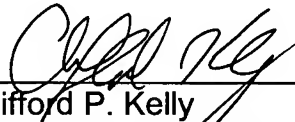
In the cited prior art, the stimulation signal is immediately ramped down to zero when the foot is placed on the ground. Similarly, the second control signal (the extension signal) of claim 11 is not disclosed in the prior art.

The cited prior art does not include the extension portion of the subject invention. MPEP § 706.02(j) states "[t]o establish a *prima facie* case of obviousness, three basic criteria must be met. ... the prior art reference (or references when combined) must teach or suggest all the claim limitations." See also MPEP §§ 2142 and 2143. Since the Office Action does not cite any prior art disclosing the extension portion recited in claim 1, the rejection must be withdrawn.

The various dependent claims add additional features to the independent claims, and are therefore believed to be allowable. Also, the dependent claims are believed patentably distinct on their own merits as being directed to combinations not suggested by the references.

In view of the above-directed amendments and the proceeding remarks, prompt and favorable reconsideration is respectfully requested.

Respectfully submitted,
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